

Remarks

Applicants thank the Examiner for the careful examination of this application and the clear explanation of the rejections.

Applicant's representative apologizes for the inadvertent labeling of claims in the preceding response. Thank you for bringing this to our attention.

The amended specification includes reference to a related patent and corrects typographical errors.

The new claims obviate the rejections under 35 USC 103. The new claims "particularly point out and distinctly claim the subject matter the applicant regards as his invention."

New claim 37 defines a process of selecting a wide band channel.

The process determines that a wide band channel should be selected.

The process tunes a filter to successive narrow band channels within one wide band channel.

The process passively observes each of the successive narrow band channels for at least one of quality, interference, and received signal strength indication.

The process sums the observations of the all of the successive narrow band channels of the one wide band channel.

The process repeats the steps of tuning, observing and summing for another wide band channel.

The process selects the one or the other wide band channel for wireless communication between devices based on the summed observations of each wide band channel.

In contrast, US 5,907,812 to Van De Berg discloses:

There is provided a method and an arrangement for flexible coexistence of several radio communication systems on a common radio frequency band. The radio frequency band has a larger bandwidth than the communication frequency band of the several radio communication systems. Prior to the start of a radio communication, the radio frequency band is scanned by a radio transceiver unit of a system for the detection of the presence of interference. The transceiver units are arranged to establish communication over any idle part of the radio frequency band comprising or covering the communication frequency band, thereby avoiding the need for frequency or channel planning. The invention can be used in Personal Communication Systems (PCS) or Cordless Terminal Mobility (CTM) services and Radio in the Local Loop (RLL) applications. (Abstract)

The patent to Van De Berg thus discloses selecting one of plural communication frequency bands in a wider radio frequency band by scanning each communication frequency band in the radio frequency band for interference. The disclosed process then selects an unused communication frequency band for wireless communication. Thus, communication can occur over any one of the communication frequency bands without having to allocate fixed communication frequency bands for communication.

A word search of the specification of the patent to Van De Berg failed to locate any of the words “sum”, “combine”, or “add”. There is also no mention of observing each of the successive narrow bands of one and another wide band channel.

US 6,594,495 to Salonaho discloses:

The invention relates to a method for load control and a radio system. In the invention a load result describing the load is cell-specifically formed. The load result is formed either by comparing a signal strength of desired signals and a combined total strength of interferences and the desired signals or by weighting a signal-to-interference ratio with a bandwidth or a data transmission rate. The load result is compared with a threshold value of the highest load level allowed of a cell. The data transmission rate in the cell is increased if the load result is smaller than the threshold value. The data transmission rate in the cell is reduced and the establishment of new connections is avoided if the load result exceeds the threshold value. In heavy load situations a signal-to-interference objective is also changed in order to balance the load result. (Abstract)

The patent to Salonaho thus discloses increasing or decreasing the transmission rate in a cell of a CDMA cellular radio system. The decision whether to increase or decrease the transmission rate is made in one of two ways. One appears to weigh a signal-to-interference ratio of all of the connections with users in the cell with a transmission rate.

The other appears to compare the signal strength of desired signals with the total strength of interferences and the desired signals of all connections with users in the cell. The description of Figure 2 in the specification, bridging columns 5 and 6, defines this process. This other way appears to use the total multipath interference of all the connections

with users of the cell in the total strength comparison and not the interferences from individual narrow bands.

Again, there is also no mention of observing each of the successive narrow bands of one and another wide band channel.

New claim 37 distinguishes over the disclosures in the patents to Van De Berg and Salonaho with the limitations of tuning a filter to successive narrow band channels within one wide band channel, passively observing each of the successive narrow band channels for at least one of quality, interference, and received signal strength indication, summing the observations of the all of the successive narrow band channels of the one wide band channel, repeating the steps of tuning, passively observing, and summing for another wide band channel, and selecting the one or the other wide band channel for wireless communication between devices based on the summed observations of each wide band channel.

Claim 37 stands allowable.

The depending claims also stand allowable as depending from allowable independent claim 37 and as including, in combination with the limitations of the independent claim, additional distinguishing limitations.

Claim 38 requires that the tuning includes tuning a filter to every narrow band channel in the one wide band channel.

Claims 39 requires that the tuning includes tuning a filter to only some of the narrow band channels in the one wide band channel.

The application is in allowable form and the claims distinguish over the cited references. Applicants respectfully request reconsideration or further examination of this application.

Respectfully Submitted,

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